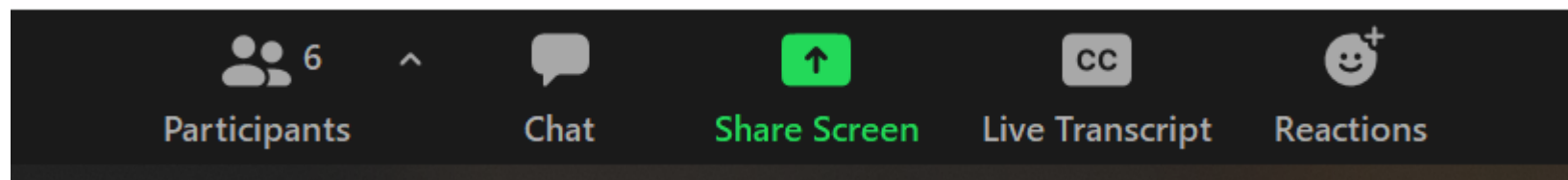
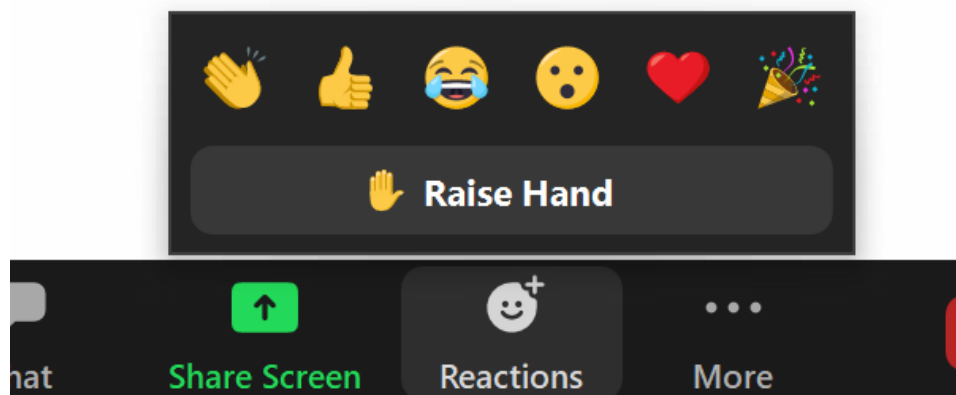


# Navigating Zoom features

- Chat
- Raise hand & Reactions
- CC Live Transcript





# 2024 Municipal Stormwater Permit Reissuance - Western Washington focus

Water Quality Program

Abbey Stockwell; Amy Waterman; Amanda Heye; Mark Melton



# Welcome!

## To-do

- Quick permit overview
  - Reissuance next steps
- Permit reissuance - Western WA focus
  - Preliminary Draft
- Break 😊
- SWMM Updates
- Hear from you



# Municipal Stormwater Permits

Quick permit overview







**The problem with stormwater is...**





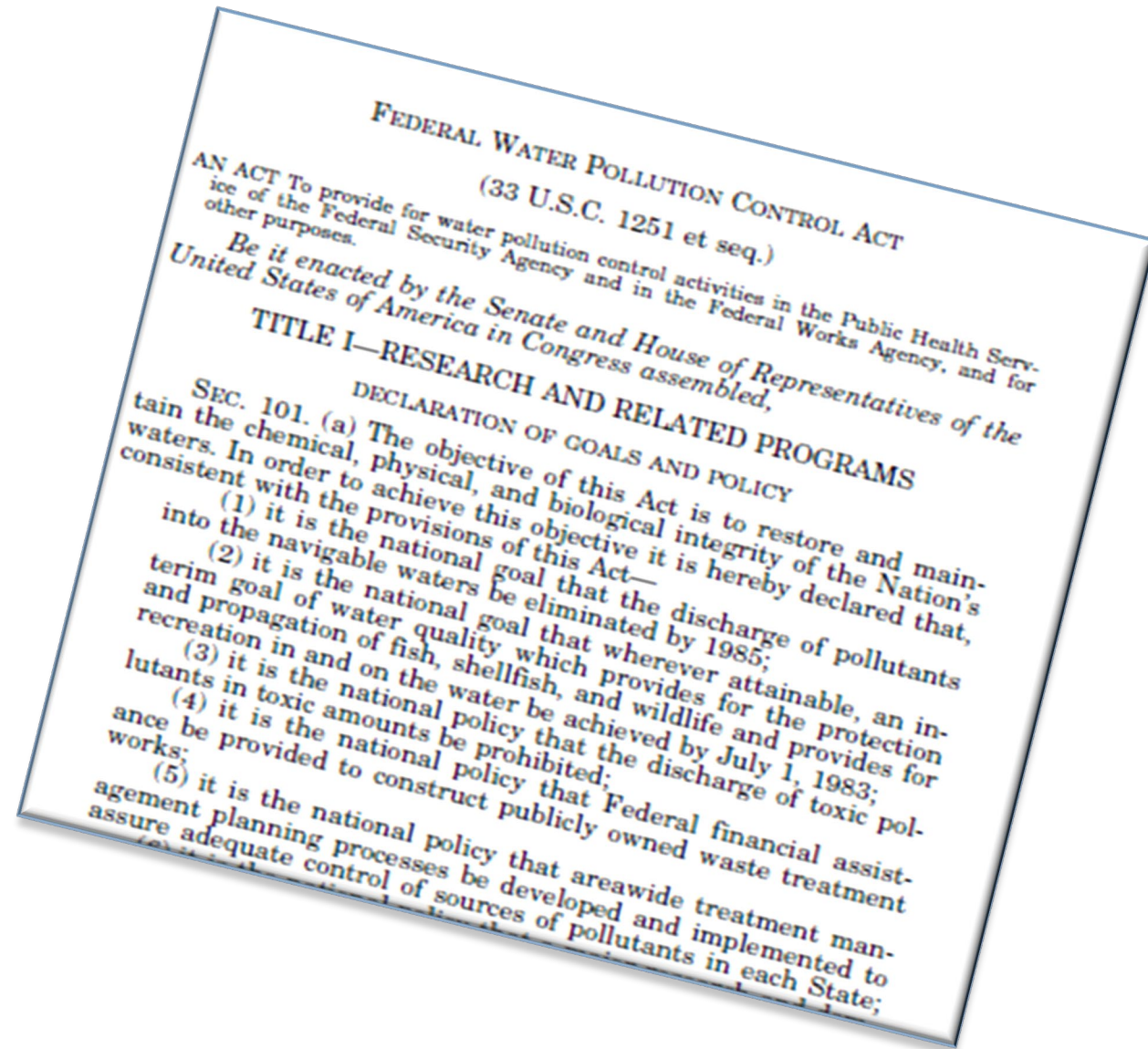
... how we all use the land every day





# Municipal Stormwater Permits implement Federal and State rules

- Federal Clean Water Act
  - Maximum Extent Practicable (MEP)
- State Water Pollution Control Act
  - All Known, Available, and Reasonable methods of prevention, control, and Treatment (AKART)





# So, what is regulated?

- Discharges from **publicly owned Mmunicipal Separate Storm Sewer Systems (MS4s).**
- Including:
  - ✓ Roads with drainage systems
  - ✓ Municipal streets
  - ✓ Catch basins
  - ✓ Curbs and gutters
  - ✓ Ditches and other man-made channels
  - ✓ Storm drains



# Permit History

## Phase I

(Issued 1995,  
reissued 2007, 2012, 2019)

- King, Snohomish, Pierce, & Clark Counties; Cities of Seattle & Tacoma

## Western WA Phase II

(Issued 2007,  
reissued 2012, 2019)

- 83 cities and parts of 5 counties

## Eastern WA Phase II

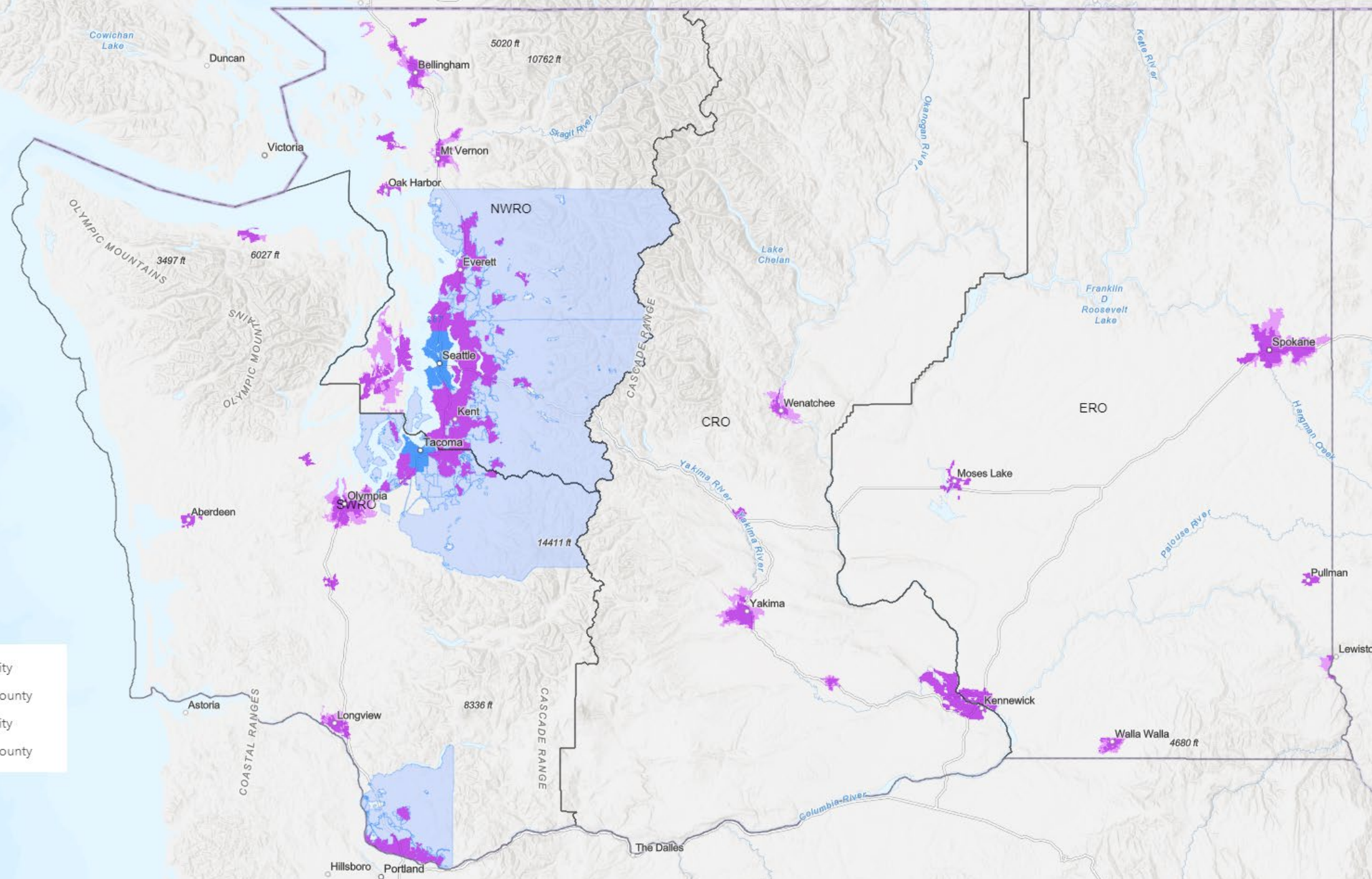
(Issued 2007,  
reissued 2012, 2019)

- 19 cities and parts of 6 counties

Phase I&II permits  
include **Secondary**  
**Permittees**

- 47 Ports, Schools, Irrigation Districts, etc.









Phase I

Western  
Phase II

Eastern Phase  
II

# Municipal Stormwater Permits

# Stormwater Management Program



Stormwater Planning

Mapping

Public Education & Outreach

Public Involvement

Illicit Discharges Detection & Elimination (IDDE)

Controlling Runoff from New Development

Operations & Maintenance (O&M)

Source Control for existing development

Structural Stormwater Controls (PH I only)

Monitoring & Assessment

Total Maximum Daily Loads (TMDLs)



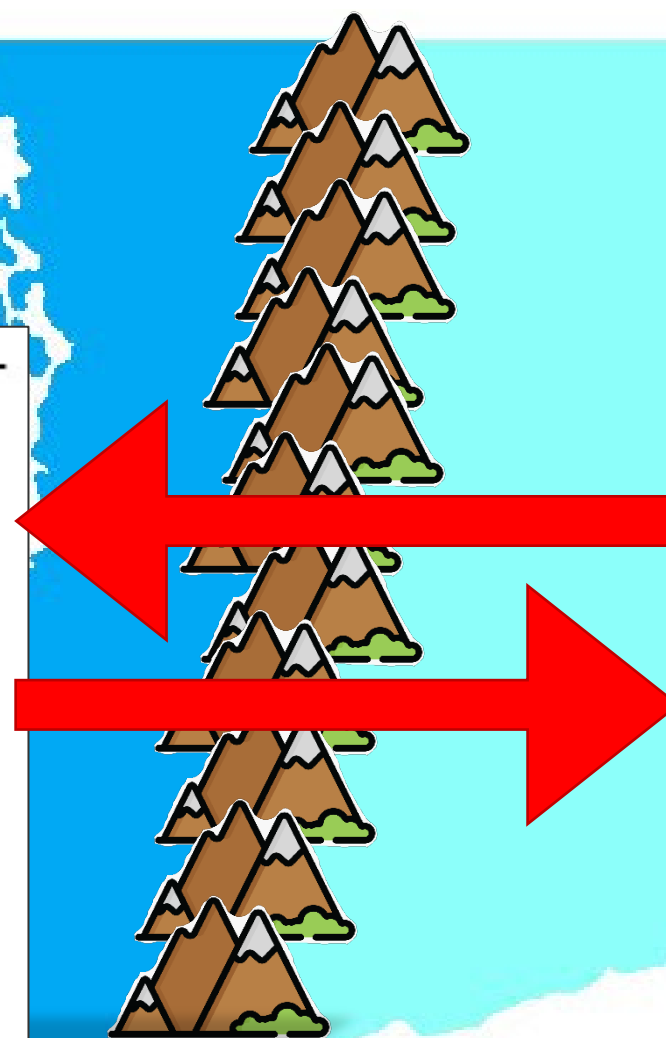
# Stormwater Management Manuals



Stormwater Management Manual  
for Western Washington



July 2019  
DEPARTMENT OF  
ECOLOGY  
State of Washington  
Publication Number 18-10-021



Stormwater Management Manual  
for Eastern Washington



August 2019  
DEPARTMENT OF  
ECOLOGY  
State of Washington  
Publication Number 18-10-044  
Recycled or recycled paper



# Things to talk about today – preliminary drafts

- Mapping – outfall reporting standard
- Street Sweeping program
- PCBs – and how the permit is trying to handle this source of pollutants
- Tree retention as a water quality tool
- Monitoring and Assessment – Eastern WA focus
- Appendix 1 updates – threshold updates for applying stormwater controls

# Things not covered today

- Structural Stormwater Controls
- (WWA) Phase II retrofit approach
- Stormwater Planning
- Education and Outreach
- EJ
- S4- Compliance with Standards
- Clarifications
- Annual Reports
- TMDLs
- New Permittees
- UICs

# Policy Advisory Committee

## Structural Stormwater Controls (SSC)

Next preliminary draft – for early 2023





# Structural Stormwater Controls Policy Advisory Committee



<https://www.pexels.com/photo-photo-of-people-working-together-1977777/>

# Phase II Retrofit program





# Proposed changes to S5

- Initial thinking - Not an exhaustive list
- Revised formatting throughout
- Statewide consistency – where appropriate



# Tentative Reissuance Timeline

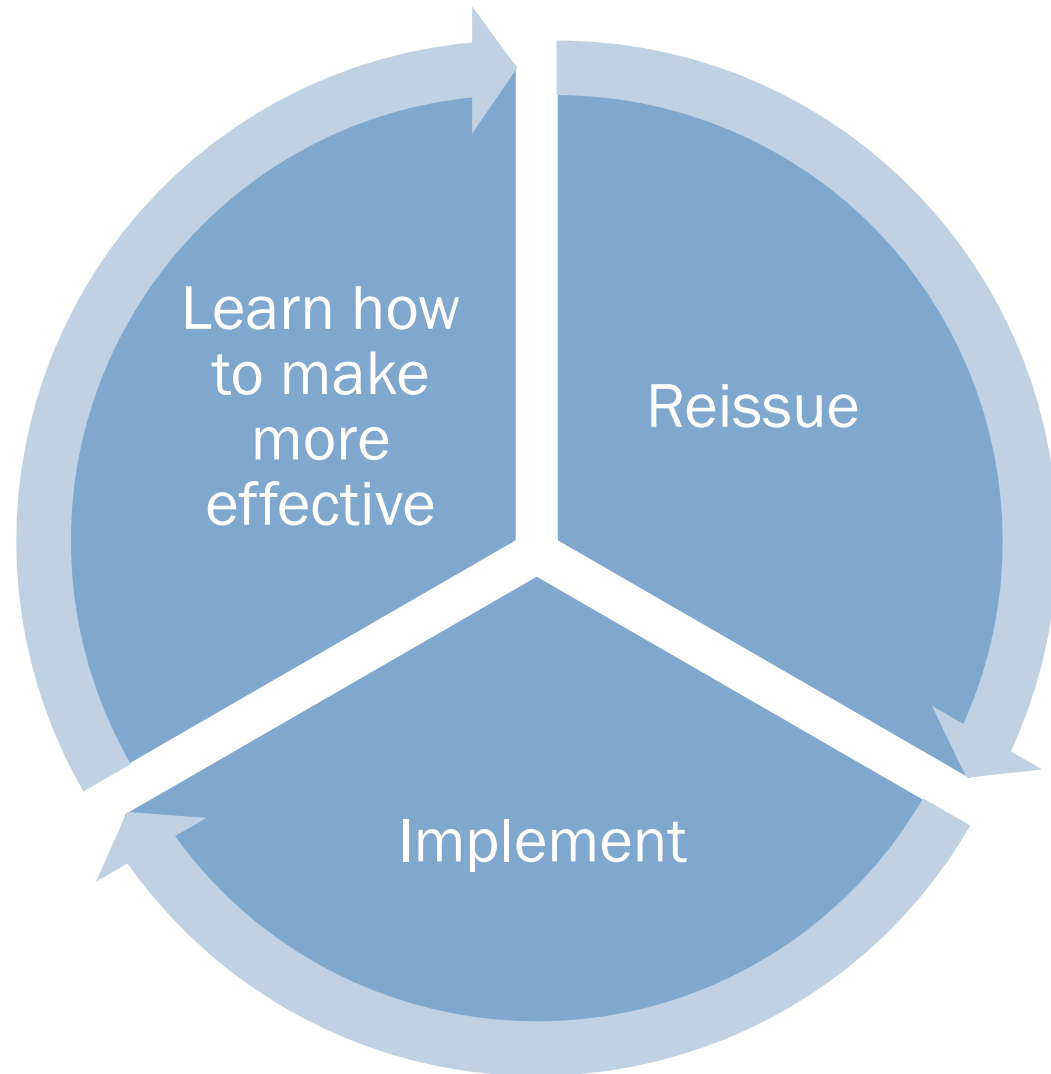
Where we're headed next





# 2024 Municipal Stormwater Permit Reissuance

## 5-year permit cycle



# The Longest



# Shortest Time

<https://www.wnyc.org/shows/longestshortesttime/>



# Informal Comments due Dec 2!

Submit your comments thru e-Comments

Excel template to help us sort your comments



# Significant Updates Proposed

- Address tire wear research findings – Road Runoff
- Enhance Source Control requirements
  - street sweeping program
  - PCBs in building materials
- Update Appendix 1
  - Project thresholds
  - Wetland protections



# Address road runoff

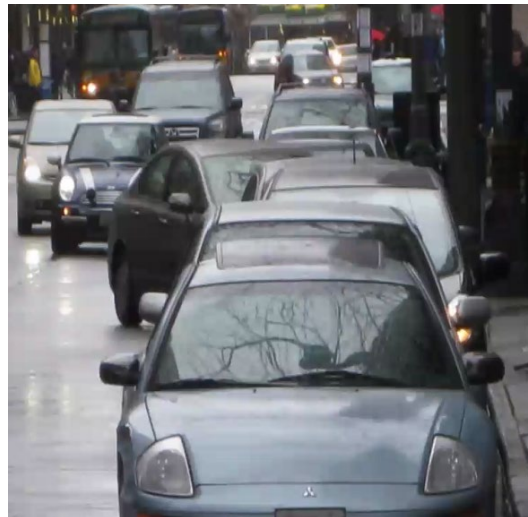
Tire wear research





# Ubiquitous Tire Preservative Kills Salmonids

- It took 20+ years of investigation to identify the chemical that causes pre-spawn mortality of Coho



Road runoff  
→  
6PPD-quinone



# Ecology's questions about 6PPD/q

- 1 Is there a safe, viable alternative to 6PPD?
- 2 Do we have the analytical methods we need?
- 3 What are other biological effects of 6PPD-quinone?
- 4 What are the best stormwater management approaches?
- 5 Where should we prioritize mitigation efforts?



**6PPD -> 6PPD-Quinone**





# Proviso work

- 2021: Identify *existing* BMPs for reducing the toxicity to Coho and other aquatic life
- 2022: Study and develop BMPs to treat stormwater containing tire wear





**Tire/tire  
wear sources**

**statewide  
priority**





# Muni Permit programs

Reviewing requirements to enhance for Road runoff

- Street sweeping program
- Redevelopment
- SSC and SW retrofits





# Comments/ Questions?



DEPARTMENT OF  
**ECOLOGY**  
State of Washington



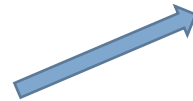
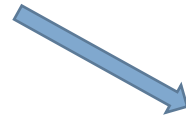
# Mapping

Standard outfall reporting





# SW Outfalls to Surface Water





# A Reporting Standard...

Will make it easier to share outfall data with each other and with Ecology.

# Templates – which will work best?

Excel

Geodatabase

Shapefile

ArcGIS  
Online  
template



# Proposed Attributes

<b>Outfall_ID</b>	<b>REQUIRED</b>
<b>Permit_Number</b>	<b>REQUIRED</b>
<b>Latitude_Decimal_Degrees</b>	<b>Required IF using excel template to submit</b>
<b>Longitude_Decimal_Degrees</b>	<b>Required IF using excel template to submit</b>
<b>Horizontal_Datum</b>	<b>Required IF using excel template to submit</b>
<b>Horizontal_Coordinate_Accuracy</b>	<b>REQUIRED</b>
<b>Horizontal_Coordinate_Collection_Method</b>	<b>REQUIRED</b>
<b>Outfall_Elevation</b>	<b>Recommended</b>
<b>Elevation_Units</b>	
<b>Vertical_Datum</b>	
<b>Elevation_Accuracy</b>	
<b>Elevation_Collection_Method</b>	
<b>Pipe_Or_Ditch_Size</b>	
<b>Pipe_or_Ditch_Size_Units</b>	
<b>Pipe_Or_Ditch_Material</b>	





Questions?

# Enhance Source Control requirements

street sweeping program  
PCBs in building materials





# Street Sweeping







## Street sweeping

- 3 yrs to develop program
- Sweep high priority areas
  - Once before rainy season
  - 2 additional times/year
  - 90% of high priority areas that directly discharge to surface waters
- Maintenance, disposal, training





**Questions?**

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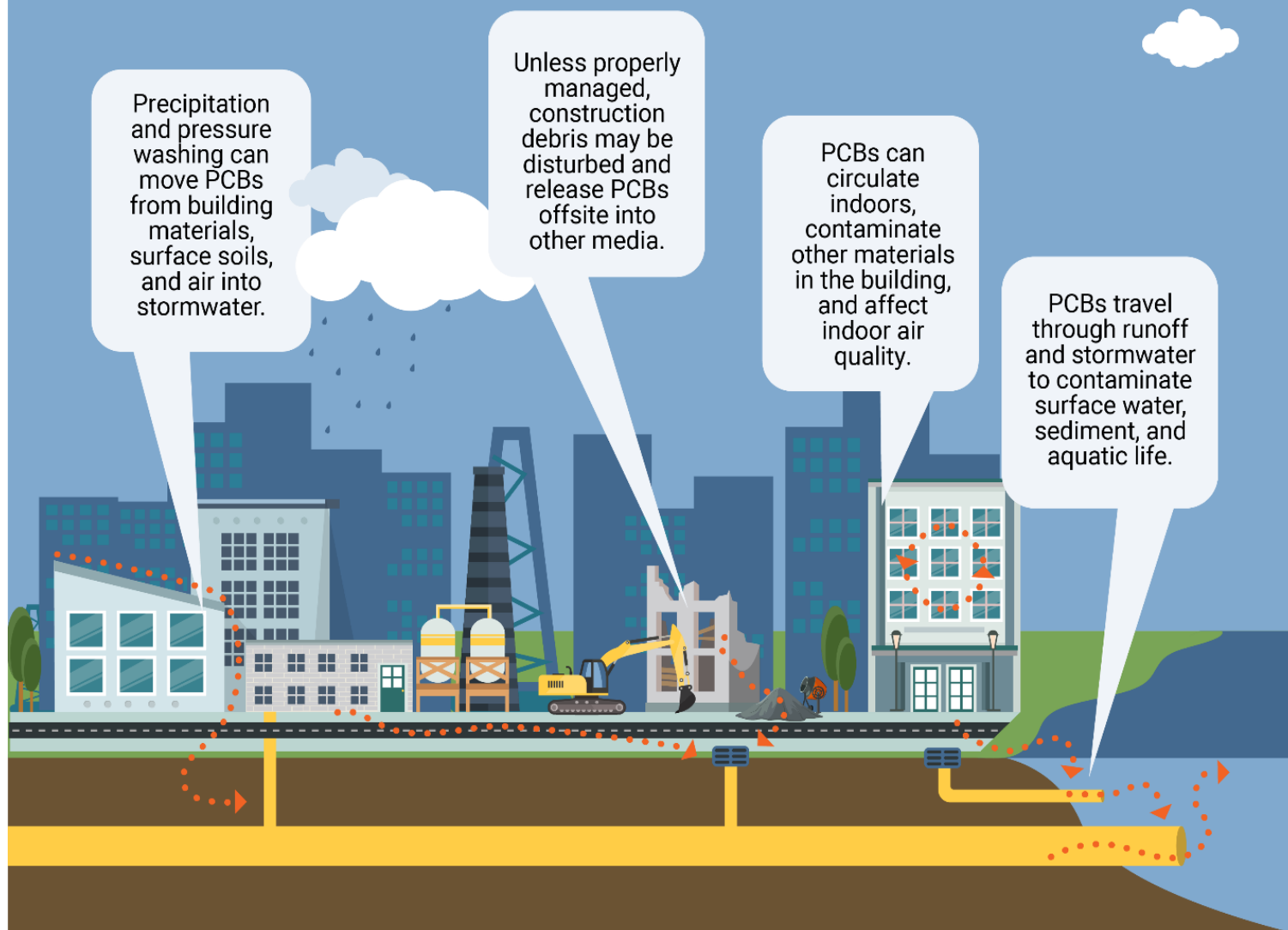
# Source control for PCBs

- Preventing movement of PCB's from buildings into stormwater
- Target: Exterior building materials for those built between 1950-1980





## PCB CONTAMINATION PATHWAYS



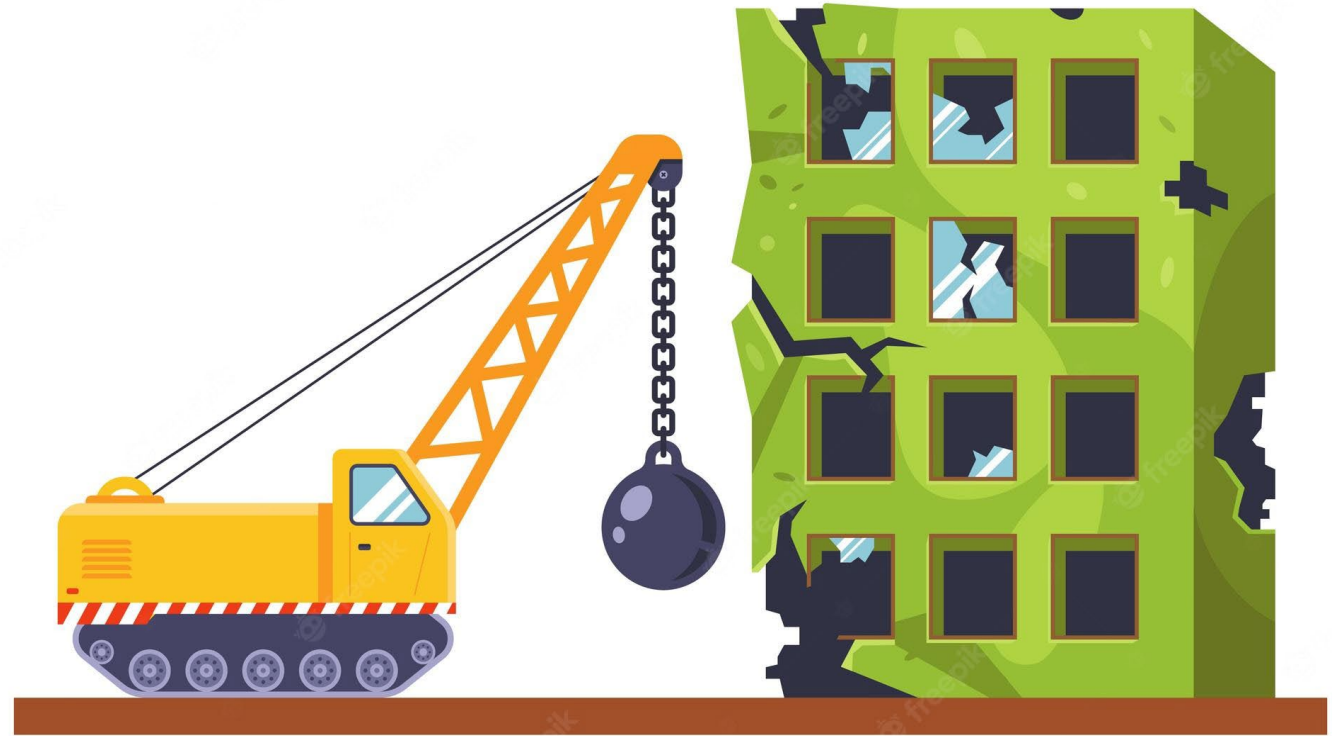
Exterior PCB-containing materials on a building degrade and flake off over time.

Greater chance that more PCBs will be released into the environment during renovation and demolition.

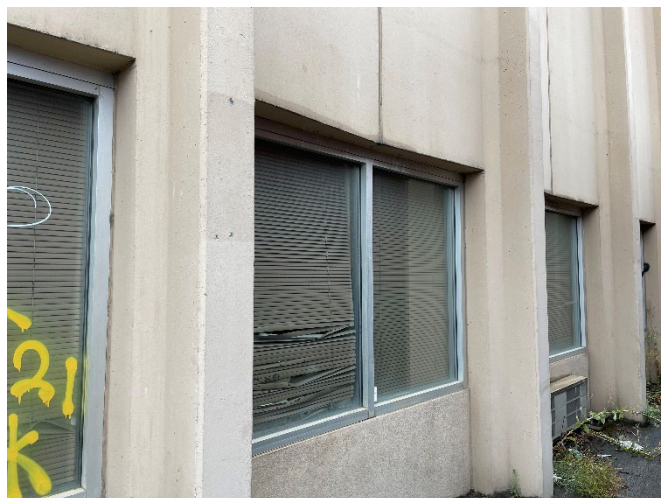
PCB's travel to soils and stormwater from rain, pressure washing, construction debris.

# Source control for PCBs: Some Tools

- ECY guidance: “How to Find and Address PCB’s in Building Materials”
  - Search “PCB’s in building materials” on website, at bottom
- Permit changes to 3 different sections
  - Education & Outreach
  - Illegal Discharge Detection and Elimination
  - Operations and Maintenance
- Proposed changes to Manual







Education & Outreach



# Illicit Discharge Detection and Elimination

- Goal is to avoid external building washwater with PCB's getting into MS4.
- Conditionally allowable discharges are further clarified.





# Operations and Maintenance

- For the O&M Plan section, asking permittees to implement policies and practices regarding:
  - ❖ Proper management of washdown water from buildings built between 1950-1980.
  - ❖ Proper handling of building materials and source control in preparation for demolition and renovation





# Questions





# Tree Retention

Tracking Tree Canopy





# Tree Canopy

- Statewide proposal
- Critical to receiving water health
- Tree canopy as a water quality tool



# Tree Canopy Retention

## Document:

- existing landscape and riparian tree canopy cover
- canopy change over time

## Adopt and implement:

- Tree canopy retention/restoration objectives to support stormwater management









Questions?

# Monitoring & Assessment





# S8 – Monitoring & Assessment



# Effectiveness studies





## S8. Monitoring and Assessment - EWA

- Continuing to implement a regional effectiveness study, or lead own study – similar to current requirements
- SAM Effectiveness Study and Source ID Program –
  - SAM = Stormwater Action Monitoring
  - Pooled funding program – based on population
  - Leverage other studies to be statewide or EWA specific
  - Vote on studies by participating in Stormwater Work Group
- Stormwater discharge monitoring

**Questions/Comments?**





# Appendix 1

## Thresholds



# Appendix 1 – Proposed Updates

- Clarity on exemptions – to ensure intended use
- Redevelopment thresholds – determine review of requirements
  - Lowering Project level thresholds
    - To capture more road and commercial/industrial projects with potential to pollute
- Runoff Treatment (MR6)
  - Lowering Threshold Discharge Area for runoff treatment
    - Threshold used after considering the Project Level



# Comments/ Questions?

[abbey.stockwell@ecy.wa.gov](mailto:abbey.stockwell@ecy.wa.gov)

[amy.waterman@ecy.wa.gov](mailto:amy.waterman@ecy.wa.gov)

[amanda.heyne@ecy.wa.gov](mailto:amanda.heyne@ecy.wa.gov)

